

AMENDMENTS TO THE CLAIMS

Please cancel claims 8, 15, 17 and amend claims 7, 9, 11-14, 16 and 20, as shown below. A complete listing of claims, including their current status, is provided below.

1-6. (Cancelled)

7. (Currently amended) A method for detecting the presence of a target nucleic acid, comprising:

(a) hybridizing a probe with an attached label transition metal ligand complex to said target nucleic acid to produce an initial complex;

(b) adding a metal ion to the initial complex to produce an electrically conductive complex ~~a final complex~~; and,

(c) applying an electrical potential ~~a potential~~ to the ~~final~~ electrically-conductive complex to produce a measurable light signal.

8. (Cancelled)

9. (Currently amended) A method as recited in claim 7 ~~claim 8~~, wherein said transition metal-ligand complex has a central atom selected from the group consisting of osmium and ruthenium.

10. (Original) A method as recited in claim 7, wherein the metal added in step (b) is selected from the group consisting of zinc, cobalt and nickel.

11. (Currently amended) A method as recited in claim 7, wherein said measurable light signal is a chemiluminescent signal.

12. (Currently amended) A method as recited in claim 7, wherein said measurable light signal is an electrochemiluminescent signal.

13. (Currently amended) A method as recited in claim 7, wherein a plurality of metal ions is added to said ~~initial~~ electrically conductive complex.

14. (Currently amended) A method as recited in claim 7, wherein a plurality of different metal ions is added to said initial electrically conductive complex.

15. (Cancelled)

16. (Currently amended) A method for detecting the presence of a nucleic acid target, comprising:
independently adding together a probe having an attached ~~label~~ transition metal-ligand complex, a target capable of hybridizing to the probe, and a metal ion to produce an electrically-conductive complex; and ions:
applying an electrical potential to said electrically conductive complex to detect the presence of said nucleic acid target.

17. (Cancelled)

18. (Original) A method as recited in claim 16, wherein said transition metal-ligand complex is selected from the group consisting of osmium and ruthenium with organic coordinating ligands.

19. (Original) A method as recited in claim 16, wherein the metal ions are selected from the group consisting of zinc, cobalt and nickel.

20. (Currently amended) A method for detecting the presence of a nucleic acid target, comprising:

(a) hybridizing a probe having an attached ~~label~~ transition metal-ligand complex with said target to produce an initial complex, wherein the ~~label~~ transition metal-ligand complex produces a light signal in response to application of an electric a-potential;

(b) adding a metal ion to the initial complex to produce a final electrically conductive complex; and

(c) applying the electric potential through the final complex to the ~~label~~ transition metal-ligand complex, to cause the label to produce the light signal.

21. (Cancelled)